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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/845,138

04/30/2001

Hernan G. Otero

21710-68171

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03/08/2007

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EXAMINER

PATEL, JAGDISH

ART UNIT

PAPER NUMBER

3693

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/08/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/845,138

Applicant(s)

OTERO ET AL.

Examiner

JAGDISH PATEL

Art Unit

3693

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-13, 18-28 and 33-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-13, 18-28 and 33-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. In view of the Appellant's brief filed on 9/26/2006 PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The examiner for this application has changed. Please indicate Examiner Jagdish Patel as the examiner of record in all future correspondences.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-13, 18-28 and 33-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 6 is analyzed as exemplary to all other claims.

Claim 6 fails to specify how the apparatus executes a trade because there are no functioning elements which perform this process. The claim recites that a first algorithm plug-in for implementing a first trading strategy and a second plug-in for carrying out trades in a first market are implemented in an engine. Therefore, the claimed apparatus is an engine (i.e. JAVA or similar platform) having the first and the second plug-ins implemented in it. The apparatus

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claim fails to specify and functional relationship of the plug-ins and the role of the plug-ins in executing a trade.

6. The Claims 6-28 are also rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

The apparatus recites that the first set of plug-ins may be substituted for the second set of plug-ins. This requires that only one set is structurally (or functionally) related to the engine in which the plug-ins can be implemented. Therefore, the other set of plug-ins is not structurally (or functionally) related to the engine.

7. Claims 27 and 28 are not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. They combine product or apparatus (a plug-in) and a method. A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F. 2d 1200, 1217 (Fed. Cir. 1991).

8. Claims 27 and 28 fail to particularly pointing out and distinctly claiming the subject matter which the applicant as the invention because the claim fails to specify any structure or functionality of the recited plug-ins. One of ordinary skill in the art would not be able to ascertain the scope the claimed inventions.

9. Claim 33-45 are rejected under 35 USC 112 (second) because they do not positive recite that the configured engine carry out trades in accordance with the trading strategy implemented and in accordance with market rules implemented by the respective plug-ins. The process of

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using is treated as mere intention to carry out trades and therefore renders the claim indefinite as to whether the trades are indeed carried out. It is recommended that the claim be amended to positively recite the process of carrying out trades as follows:

carrying out trades using the configured engine in accordance with ....;

It is noted that this analysis is also applicable to apparatus claims 40 and 45.

### ***Claim Rejections - 35 USC § 101***

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 6-13 and 18-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In order to be statutory subject matter under 35 U.S.C. 101 the claimed invention must be directed to a “useful, concrete and tangible result”. (see Street Bank & Trust Co. v. Signature Financial Group, 149 F.3d 1368 (Fed. Cir. Jul. 23, 1998).). In the instant case, apparatus of claim 6 fails to produce a useful result because the claimed invention as a whole does not satisfy the utility requirement of 101. The utility must be specific, substantial and credible. The claimed invention recites a first algorithm plug-in for implementing a first trading strategy and a second plug-in for carrying out trades in a first market. While these plug-ins are recited as being implemented in an engine (interpreted as a JAVA or similar platforms) and treated as executables do not produce useful result because there are no limitations, i.e. structural elements which actually execute trades. Note that function of executing trade is recited only as an intended function of the implementation of the plug-ins in the engine (“..in order to execute a trade).

Therefore, it is asserted that there is no specific utility of the apparatus recited and therefore the claimed apparatus fails to the “useful” prong of the test to be deemed statutory subject matter under 35 U.S.C. 101.

This or similar analysis applies to dependent claims 7-13. Method claims 18-26 recite process underlying the apparatus of claims 7-13 and therefore rejected as per apparatus claims.

Claims 27 and 28 are rejected because the claimed inventions do not fall within one of the four categories of invention permitted by 35 USC 101.

If the claimed invention does not fall within one of the four categories, or if the claimed invention is directed to multiple statutory categories of invention the claimed invention is non-statutory.

The following are four statutory categories of inventions under 35 USC 101.

A “machine”, “manufacture”, and “composition of matter” all define things or products.

Claim 27 and 28 both recite a plug-ins which are treated as algorithms. Claims 27 and 28 do not fall into any of the aforementioned categories of the inventions and therefore are directed to non-statutory subject matter.

It appears the claimed invention is directed to multiple statutory categories of invention, see the analysis in MPEP 2173.05(p). Claims 27 and 28 recite a product (?) and a process. Therefore, the claimed inventions are deemed non-statutory under 35 USC 101.

### ***Claim Objections***

Claims 27 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

See also MPEP § 608.01(n), "Infringement Test" for dependent claims. The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim.

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Claim 27 recites a product which depends upon process claim 22. An algorithm plug-in would infringe on claim 22. However, the algorithm plug-in would not infringe the method steps of claim 22. Since the algorithm plug-in never performs any of the process steps of claim 22, as a result claim 27 is improper dependent claim.

Similarly claim 28 is also treated as improper dependent claim.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748.

The examiner can normally be reached on **800AM-630PM Mon-Tue and Thu.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

(Primary Examiner, AU 3693)

3/5/07